

IN THE CLAIMS:

Please amend the claims as follows:

Sub B1 1. (Amended) A method for etching deep trenches in a substrate, comprising the steps of:
securing a wafer to an electrode in a plasma chamber;
heating the wafer to a temperature of greater than 200 degrees Celsius; and
exposing the wafer to a reactive plasma to etch deep trenches into the substrate of the wafer.

Sub B2 14. (Amended) A method for etching deep trenches in a substrate, comprising the steps of:
forming a hardmask on a substrate;
 patterning the hardmask;
securing a wafer to an electrode in a plasma chamber;
maintaining the electrode at a temperature of between about 200 and about 450 degrees Celsius to achieve about the same temperature in the wafer; and
exposing the wafer to a reactive plasma to etch deep trenches into the substrate of the wafer in accordance with the hardmask pattern.

23. (Amended) A method for etching deep trenches in a substrate, comprising the steps of:

clamping a wafer onto a electrode in a plasma chamber;

maintaining the electrode at an elevated temperature between of about 200 degrees and 450 degrees Celsius;

exposing the wafer to a reactive plasma including Cl₂, BCL₃, Ar, O₂, and N₂;

applying a backside pressure to the clamped wafer using He to achieve thermal

X3 contact between the wafer and the electrode such that the wafer is maintained at about the same temperature as the electrode; and

applying a bias power to the wafer electrode to accelerate ions from the plasma to achieve etching of the substrate to form deep trenches.

Please add the following New claims:

26. (New) The method as recited in claim 1, wherein the step of securing the wafer includes the step of applying a backside pressure of about 6 torr or greater to the secured wafer while maintaining a wafer temperature of about 200 degrees Celsius or greater.

27. (New) The method as recited in claim 1, wherein the step of heating the wafer includes the step of heating the wafer to a temperature of between about 300 and about 450 degrees Celsius.

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28. (New) The method as recited in claim 14, wherein the step of securing the wafer includes the step of applying a backside pressure of about 6 torr or greater to the secured wafer while maintaining a wafer temperature of about 200 degrees Celsius or greater.

X heat

29. (New) The method as recited in claim 14, wherein the step of heating the wafer includes the step of heating the wafer to a temperature of between about 300 and about 450 degrees Celsius.

X heat

30. (New) The method as recited in claim 23, wherein the step of securing the wafer includes the step of applying a backside pressure of about 6 torr or greater to the clamped wafer while maintaining a wafer temperature of about 200 degrees Celsius or greater.

31. (New) The method as recited in claim 23, wherein the step of heating the wafer includes the step of heating the wafer to a temperature of between about 300 and about 450 degrees Celsius.